



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/718,642

11/24/2003

Ying Tat Leung

YOR920030362US1

1196

21254

7590

11/13/2009

MCGINN INTELLECTUAL PROPERTY LAW GROUP, PLLC
8321 OLD COURTHOUSE ROAD
SUITE 200
VIENNA, VA 22182-3817

EXAMINER

DAM, KIM LYNN

ART UNIT

PAPER NUMBER

2179

MAIL DATE

DELIVERY MODE

11/13/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/718,642	Applicant(s) LEUNG ET AL.	
	Examiner KIM-LYNN DAM	Art Unit 2179	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 August 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-6,8-10,12-14 and 16-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4-6, 8-10, 12-14, and 16-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to the amendment filed on 8/11/09.
2. Claims 1, 2, 4-6, 8-10, 12-14, and 16-34 have been examined and are pending.
Claims 1, 8, 22-25 and 28 are independent. **This action is made final.**

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-2, 4-6, 8-10, 12-14, 16-19, 22-32 and 34 are rejected under 35 U.S.C. 102(e) as being anticipated by Bogward (US 20040049743).

Regarding claim 1, Bogward disclosed a portable computing device comprising:

a display (Paragraphs [0012], [0190]; Figures 1,2 and 18); and

a touch-sensitive display which is secondary and attachable to the display

(Paragraphs [0012], [0190]; Figures 1,2 and 18),

wherein said display and said touch-sensitive display display two adjoining display portions of a single display output (Paragraphs [0012], [0256]; Figures 1, 2, 52d),

wherein only said touch-sensitive display is touch-sensitive (Figures 18 and 103).

Regarding claim 2, Bogward disclosed the portable computing device of claim 1, wherein the touch-sensitive display is rotatably attachable to the display (Paragraphs [0156, [0190]; Figures 1, 18 and 19).

Regarding claim 4, Bogward disclosed the portable computing device of claim 1, wherein said touch-sensitive display displays a user-interface that overlays a portion of said single display output (Paragraph [0012]; Figures 1, 2 and 32).

Regarding claim 5, Bogward disclosed the portable computing device of claim 4, wherein the user-interface comprises a pointing device (Paragraphs [0012] and [0158]).

Regarding claim 6, Bogward disclosed the portable computing device of claim 4, wherein the user-interface is reconfigurable in accordance with an instruction from a software application being executed on the portable computing device (Paragraphs [0062], [0170], [0205] and [0253-0262]; Figures 48, 52b-d, and 53; where interface is reconfigurable depending on settings, configurations, right/hand left hand modes, applications of use).

Regarding claim 8, Bogward disclosed a method of driving a portable computing device

Art Unit: 2179

having a display attachable to a touch-sensitive display that is secondary and attachable to the display, the method comprising:

displaying a first of two adjoining display portions of a single display output in one of said display and said touch-sensitive display (Paragraphs [0012], [0190]; Figures 1,2 and 18);

displaying a second of said two adjoining display portions of said single display output in the other of said display and said touch-sensitive display (Paragraphs [0012], [0190]; Figures 1,2 and 18);

wherein said display and said touch sensitive display display said two adjoining display portions as a single display output (Paragraphs [0012], [0256]; Figures 1, 2, 52d), and

wherein only said touch-sensitive display is touch-sensitive (Figures 18 and 103).

Regarding claim 9, Bogward disclosed the method of claim 8, wherein the display is rotatably attachable to the touch-sensitive display (Paragraphs [0156, [0190]; Figures 1, 18 and 19).

Regarding claim 10, Bogward disclosed the method of claim 8, wherein said touch-sensitive display further comprises displaying a user-interface comprising a keyboard (Paragraphs [0012] and [0047]; Figures 1 and 34).

Regarding claim 12, Bogward disclosed the method of claim 10, further comprising

Art Unit: 2179

reconfiguring the user-interface in response to an application state (Paragraphs [0062], [0170], [0205] and [0253-0262]; Figures 48, 52b-d, and 53; where interface is reconfigurable depending on settings, configurations, right/hand left hand modes, state of use).

Regarding claim 13, Bogward disclosed the method of claim 12, wherein reconfiguring the user- interface comprises reconfiguring the user-interface in response to a user preference (Paragraphs [0062], [0170], [0205] and [0253-0262]; Figures 48, 52b-d, and 53; where interface is reconfigurable depending on settings, configurations, user preference of right/hand left hand modes, state of use).

Regarding claim 14, Bogward disclosed the method of claim 12, wherein reconfiguring the user- interface comprises reconfiguring the user-interface in response to a user instruction (Paragraphs [0062], [0170], [0205] and [0253-0262]; Figures 48, 52b-d, and 53; where interface is reconfigurable depending on settings, configurations, user preference of right/hand left hand modes, state of use).

Regarding claim 16, Bogward disclosed the method of claim 8, further comprising displaying a hot key that triggers the execution of a plurality of instructions in accordance with a state of the portable computing device (Paragraphs [0159-0163], [0178]; Figures 1-3 and 12; where keys trigger applications).

Regarding claim 17, Bogward disclosed the method of claim 8, further comprising displaying an application result (Paragraphs [0159-0163], [0178]; Figures 1-3 and 12; where keys trigger applications).

Regarding claim 18, Bogward disclosed the method of claim 17, wherein displaying an application result comprises displaying a first page of an electronic book on one of the display and the touch-sensitive display (Paragraphs [0107], [0256], [0235]; Figures 41c, 52d, and 85).

Regarding claim 19, Bogward disclosed the method of claim 18, wherein the displaying of the application result further comprises displaying a second page of an electronic book on the other one of the display and the touch-sensitive display (Paragraphs [0107], [0256], [0235]; Figures 41c, 52d, and 85).

Regarding claim 22, Bogward disclosed a programmable storage medium tangibly embodying a program of machine-readable instructions executable by a digital processor for driving a portable computing device having a display attachable to a touch-sensitive display secondary and attachable to the display, the program comprising:

instructions displaying a first of two adjoining display portions of a single display output in one of said display and said touch-sensitive display (Paragraphs [0012], [0190]; Figures 1,2 and 18);

instructions displaying a second of said two adjoining display portions of said single display output in the other of said display and said touch-sensitive display (Paragraphs [0012], [0190]; Figures 1,2 and 18);

wherein said display and touch-sensitive display display said two adjoining portions as a single display output (Paragraphs [0012], [0256]; Figures 1, 2, 52d), and

wherein only said touch-sensitive display is touch-sensitive (Figures 18 and 103).

Regarding claim 23, Bogward disclosed a portable computing device comprising:

a display (Paragraphs [0012], [0190]; Figures 1,2 and 18);

touch-sensitive display which is secondary and attached to the display (Paragraphs [0012], [0190]; Figures 1,2 and 18);

means for displaying a first of two adjoining display portions of a single display output in one of said display and said touch-sensitive display (Paragraphs [0012], [0190]; Figures 1,2 and 18);

means for displaying a second of said two adjoining display portions of said single display output in the other of said display and said touch-sensitive display (Paragraphs [0012], [0190]; Figures 1,2 and 18);

wherein said display and touch-sensitive display display said two adjoining portions as a single display output (Paragraphs [0012], [0256]; Figures 1, 2, 52d), and

Art Unit: 2179

wherein said touch-sensitive display displays a reconfigurable user-interface that overlays a portion of said single display output (Paragraphs [0012], [0062], [0170], [0205] and [0253-0262]; Figures 1-3, 48, 52b-d, and 53; where interface is reconfigurable depending on settings, configurations, right/hand left hand modes, applications of use).

Regarding claim 24, Bogward disclosed a method of providing a display for a portable computing device, the method comprising:

providing a display (Paragraphs [0012], [0190]; Figures 1,2 and 18); and

providing a touch-sensitive display which is secondary and attachable to the first display (Paragraphs [0012], [0190]; Figures 1,2 and 18); and

displaying on said touch-sensitive display a reconfigurable user-interface that overlays a portion of said single display output (Paragraphs [0012], [0062], [0170], [0205] and [0253-0262]; Figures 1-3, 48, 52b-d, and 53; where interface is reconfigurable depending on settings, configurations, right/hand left hand modes, applications of use),

wherein said display and said touch-sensitive display display two adjoining display portions of a single display output (Paragraphs [0012], [0256]; Figures 1, 2, 52d).

Regarding claim 25, Bogward disclosed a portable computing device comprising:

a first display including a touch-sensitive user-interface (Paragraphs [0012], [0190]; Figures 1, 2 and 18); and

a second display including another touch-sensitive user-interface attachable to the first display (Paragraphs [0012], [0190]; Figures 1, 2 and 18),

wherein said first and second displays display two adjoining display portions of a single display output (Paragraphs [0012], [0256]; Figures 1, 2, 52d),

wherein said touch-sensitive display displays a reconfigurable user-interface that overlays a portion of said single display output (Paragraphs [0012], [0062], [0170], [0205] and [0253-0262]; Figures 1-3, 48, 52b-d, and 53; where interface is reconfigurable depending on settings, configurations, right/hand left hand modes, applications of use, and

wherein said first and second displays receive user input on each touch sensitive user- interface (Paragraphs [0012], [0190]; Figures 1, 2 and 18).

Regarding claim 26, Bogward disclosed the portable computing device of claim 4, wherein said user- interface is configurable to one of:

remove a key from the user-interface;

change a label on a key on a user-interface; and

change a color of a key on the user-interface (Paragraphs [0012], [0062], [0170], [0205] and [0253-0262]; Figures 1-3, 48, 52b-d, and 53; where interface is reconfigurable depending on settings, configurations, right/hand left hand modes,

Art Unit: 2179

applications of use, therefore keys are removed, changed etc.

Regarding claim 27, Bogward disclosed the method of claim 8, further comprising:
displaying on said touch-sensitive display a user-interface that overlays a portion of
said single display output (Paragraph [0012]; Figures 1, 2 and 32).

Regarding claim 28, Bogward disclosed a portable computing device comprising:

- a display Paragraphs [0012], [0190]; Figures 1,2 and 18);; and

- a touch-sensitive display which is secondary and attachable to the display
Paragraphs [0012], [0190]; Figures 1,2 and 18),

- wherein said display and said touch-sensitive display display two adjoining
display portions of a single display output (Paragraphs [0012], [0256]; Figures 1, 2,
52d),

- wherein only said touch-sensitive display is touch-sensitive (Figures 18 and 103),
and

- wherein said touch-sensitive display displays a reconfigurable user interface that
overlays a portion of said single display output Paragraphs [0012], [0062], [0170], [0205]
and [0253-0262]; Figures 1-3, 48, 52b-d, and 53; where interface is reconfigurable
depending on settings, configurations, right/hand left hand modes, applications of use).

Regarding claim 29, Bogward disclosed the portable computing device according to
claim 1, wherein said touch- sensitive display displays a reconfigurable user interface

Art Unit: 2179

(Paragraphs [0062], [0170], [0205] and [0253-0262]; Figures 48, 52b-d, and 53; where interface is reconfigurable depending on settings, configurations, right/hand left hand modes, applications of use).

Regarding claim 30, Bogward disclosed the portable computing device according to claim 29, wherein said reconfigurable user interface comprises a reconfigurable keyboard (Paragraphs [0012], [0047], [0050], [0226], Figures 1, 32, 34, 37, 38; where keyboard is reconfigurable depending on type of use)

Regarding claim 31, Bogward disclosed the portable computing device according to claim 29, wherein said reconfigurable user interface comprises a reconfigurable alpha-numeric keyboard (Paragraphs [0012], [0047], [0050], [0226], Figures 1, 32, 34, 37, 38; where keyboard is reconfigurable depending on type of use)

Regarding claim 32, Bogward disclosed the portable computing device according to claim 30, wherein said reconfigurable keyboard is customizable based on a software application being used (Paragraphs [0012], [0047], [0050], [0226], Figures 1, 32, 34, 37, 38; where keyboard is reconfigurable depending on type of use)

Regarding claim 34, Bogward disclosed the portable computing device according to claim 30, wherein said reconfigurable keyboard comprises an alphabetical keyboard, and

Art Unit: 2179

wherein said user interface is configured to dynamically generate a numeric keypad over the alphabetical keyboard (Paragraphs [0051], [0230], Figures 32 and 38).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 20 is rejected under 35 U.S.C. 103(a) as being obvious over Bogward (US 20040049743) in view of Zak et al (US 20020004729).

Regarding claim 20, the rejection of claim 8 is incorporated and Bogward further disclosed comprising menus on the touch-sensitive display (Paragraph [0019]; Figures 8A-E). Bogward did not specifically disclose that those menus were drop-down menus. However, in an analogous art, Zak disclosed using drop-down menus on touch-sensitive display screens (Paragraphs [0057], [0078]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Zak into the system of Bogward since doing so would provide for easy display and selection of menu options.

Art Unit: 2179

7. Claims 21 is rejected under 35 U.S.C. 103(a) as being obvious over Bogward (US 20040049743) in view of Retter (USPN 5,825,362).

Regarding claim 21, the rejection of claim 10 is incorporated and further Bogward does not specifically disclose wherein displaying the user-interface comprises displaying a color-coded keyboard. However, Retter discloses a user-interface with a color-coded keyboard (Column 8, lines 34-53; Figure 7). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Retter into the system of Bogward since using a color-coded keyboard would allow users to more easily discern keys and makes a keyboard more user-friendly.

8. Claims 33 is rejected under 35 U.S.C. 103(a) as being obvious over Bogward (US 20040049743) in view of Dardick (US 2002/0075317).

Regarding claim 33, the rejection of claim 30 is incorporated and Bogward did not specifically disclose the portable computing device according to claim 30, wherein at least a portion of said reconfigurable keyboard is disabled when the least a portion of said reconfigurable keyboard is not appropriate for a current state of application. However, in an analogous art, Dardick disclosed customizing a touch-sensitive keyboard by displaying or hiding certain keys depending on necessity (Paragraphs [0008-0009]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Dardick into the system of

Art Unit: 2179

Bogward since doing so would provide users with a customizable keyboard (Dardick [0008]) and help users distinguish which keys are currently applicable.

Response to Arguments

Applicant is reminded that any citation to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the references should not be considered to be limiting in any way. A reference is relevant for all it contains and may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. In re Heck, 699 F.2d 1331, 1332-33, 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting In re Lemelson, 397 F.2d 1006, 1009, 158 USPQ 275, 277 (CCPA 1968)).

9. Applicant's arguments filed 8/11/09 have been fully considered but they are not persuasive. Examiner wants to clarify that in the Bogward reference, the main display part 1010 and the main operator part 1020 are interpreted as the claimed display and touch sensitive display.

On page 3 of Applicant's arguments, Applicant argues that the main operator control part 1020 is not a display. However, paragraphs [0163], [0256], figure 33b, and figure 52d disclose that 1020 is a display. Figure 33b points out that the input options are displayed on main operator control part 1020 and Figure 52d displays pages of an electronic book on both leaves 1010 and 1020; Figure 18 is used to show that the main display part 1010 can optionally be touch-sensitive or not touch-sensitive.

On page 4 Applicant argues that Bogward does not display the output that is displayed on the main display part 1010, but again Figure 52d and Paragraph [0256] show that pages of an electronic book on both leaves 1010 and 1020 therefore are from a single display output. All of the possibilities for the displays 1010 and 1020 being touch-sensitive or non-touch sensitive, or displays are simply variant features of the same device.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KIM-LYNN DAM whose telephone number is (571)270-1408. The examiner can normally be reached on M-TH 8:00-5:30, every other Friday 8:00-4:30.

Art Unit: 2179

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on (571) 272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kim-Lynn Dam

/Weilun Lo/

Supervisory Patent Examiner, Art Unit 2179